

IN THE CLAIMS

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

PENDING CLAIMS

1. (PREVIOUSLY PRESENTED) A display apparatus for displaying a color image , comprising:

a detection portion detecting number of emissions or intensity of the emissions, of input primary color video signals; and

a white balance correction portion correcting white balance by adjusting amplitudes of said input primary color video signals in accordance with said detected number of emissions or said detected intensity of the emissions.

2. (ORIGINAL) The display apparatus as claimed in claim 1, wherein said detection portion detects said number of emissions or said intensity from a display ratio of an image produced by said primary color video signals.

3. (ORIGINAL) The display apparatus as claimed in claim 2, further comprising a control portion controlling the number of emissions for, or the intensities of, said primary color video signals in accordance with said display ratio of said image.

4. (ORIGINAL) The display apparatus as claimed in claim 3, wherein said white balance correction portion comprises a computing unit and a plurality of multipliers wherein said computing unit computes amplitude coefficients for said primary color video signals in accordance with said display ratio of said image, and said multipliers multiply said primary color video signals respectively by said computed amplitude coefficients.

5. (ORIGINAL) The display apparatus as claimed in claim 3, wherein said white balance correction portion comprises a storage unit and a plurality of multipliers wherein said storage unit outputs amplitude coefficients for said primary color video signals in accordance with said display ratio of said image, and said multipliers multiply said primary color video signals respectively by said amplitude coefficients output from said storage unit.

6. (ORIGINAL) The display apparatus as claimed in claim 3, wherein said white balance correction portion comprises a storage unit wherein said storage unit outputs amplitude-adjusted primary color video signals in accordance with said primary color video signals and said display ratio of said image.

7. (ORIGINAL) The display apparatus as claimed in claim 1, wherein said detection portion detects said number of emissions or said intensity from a display current that flows when displaying an image in accordance with said primary color video signals.

8. (ORIGINAL) The display apparatus as claimed in claim 7, further comprising a control portion controlling the number of emissions for, or the intensities of, said primary color video signals in accordance with said image display current.

9. (ORIGINAL) The display apparatus as claimed in claim 8, wherein said white balance correction portion comprises a computing unit and a plurality of multipliers wherein said computing unit computes amplitude coefficients for said primary color video signals in accordance with said image display current, and said multipliers multiply said primary color video signals respectively by said computed amplitude coefficients.

10. (ORIGINAL) The display apparatus as claimed in claim 8, wherein said white balance correction portion comprises a storage unit and a plurality of multipliers wherein said storage unit outputs amplitude coefficients for said primary color video signals in accordance with said image display current, and said multipliers multiply said primary color video signals respectively by said amplitude coefficients output from said storage unit.

11. (ORIGINAL) The display apparatus as claimed in claim 8, wherein said white

balance correction portion comprises a storage unit wherein said storage unit outputs amplitude-adjusted primary color video signals in accordance with said primary color video signals and said image display current.

12. (ORIGINAL) The display apparatus as claimed in claim 1, wherein said detection portion detects said number of emissions or said intensity from an external applied luminance-adjusting input.

13. (ORIGINAL) The display apparatus as claimed in claim 12, further comprising a control portion controlling the number of emissions for, or the intensities of, said primary color video signals in accordance with said externally applied luminance-adjusting input.

14. (ORIGINAL) The display apparatus as claimed in claim 13, wherein said white balance correction portion comprises a computing unit and a plurality of multipliers wherein said computing unit computes amplitude coefficients for said primary color video signals in accordance with said externally applied luminance-adjusting input, and said multipliers multiply said primary color video signals respectively by said computed amplitude coefficients.

15. (ORIGINAL) The display apparatus as claimed in claim 13, wherein said white balance correction portion comprises a storage unit and a plurality of multipliers wherein said storage unit outputs amplitude coefficients for said primary color video signals in accordance with said externally applied luminance-adjusting input, and said multipliers multiply said primary color video signals respectively by said amplitude coefficients output from said storage unit.

16. (ORIGINAL) The display apparatus as claimed in claim 13, wherein said white balance correction portion comprises a storage unit wherein said storage unit outputs amplitude-adjusted primary color video signals in accordance with said primary color video signals and said externally applied luminance-adjusting input.

17. (ORIGINAL) The display apparatus as claimed in claim 1, wherein emissions due to said primary color video signals are produced from phosphors of three primary colors, red, green, and blue.

18. (ORIGINAL) The display apparatus as claimed in claim 1, wherein said display apparatus is a plasma display apparatus.

19. (PREVIOUSLY PRESENTED) A display apparatus for displaying a color image by controlling the number of emissions or the intensity thereof in accordance with primary color video signals input thereto, wherein:

output gray levels of images represented by said primary color video signals are adjusted in accordance with input gray levels of said images represented by said primary color video signals, thereby correcting white balance which varies with the number of emissions for, or the intensities of, said primary color video signals, wherein said display apparatus comprises:

a first detection portion detecting the input gray levels of said images represented by said primary color video signals; and

a white balance correction portion correcting said white balance by adjusting the output gray levels of said primary color video signals in accordance with said detected input gray levels, wherein said white balance correction portion comprises a computing unit and a plurality of correction units wherein said computing unit computes gray level correction coefficients in accordance with said detected input gray levels, and said correction units apply corrections to said detected input gray levels by using said computed correction coefficients.

20. (CANCELLED)

21. (CANCELLED)

22. (PREVIOUSLY PRESENTED) The display apparatus as claimed in claim 19, wherein said white balance correction portion comprises a storage unit that stores and outputs computed gray level correction coefficients in accordance with said detected input gray levels, and said correction units apply corrections to said input gray levels by using said computed correction coefficients.

23. (PREVIOUSLY PRESENTED) The display apparatus as claimed in claim 19, further comprising:

a second detection portion detecting a display ratio or display current of an image produced by said primary color video signals; and

a control portion controlling the number of emissions for, or the intensities of, said primary color video signals in accordance with said detected display ratio or said detected display current.

24. (ORIGINAL) The display apparatus as claimed in claim 19, wherein emissions due to said primary color video signals are produced from phosphors of three primary colors, red, green, and blue.

25. (ORIGINAL) The display apparatus as claimed in claim 19, wherein said display apparatus is a plasma display apparatus.

26. (PREVIOUSLY PRESENTED) A white balance correction circuit for use in a display apparatus, comprising:

a detection portion detecting number of emissions or intensity of the emissions, of input primary color video signals; and

a correction circuit correcting white balance by adjusting amplitudes of said input primary color video signals in accordance with said detected number of emissions or said detected intensity of the emissions.

27. (ORIGINAL) The white balance correction circuit as claimed in claim 26, further comprising:

a computing unit computing amplitude coefficients for said primary color video signals in accordance with said number of emissions or said intensity; and

a plurality of multipliers multiplying said primary color video signals respectively by said computed amplitude coefficients wherein:

said white balance, which varies with the number of emissions for, or the intensities of, said primary color video signals, is corrected by adjusting the amplitudes of said primary color video signals in accordance with said controlled number of emissions or said controlled intensity.

28. (ORIGINAL) The white balance correction circuit as claimed in claim 26, further comprising:

a storage unit storing amplitude coefficients for said primary color video signals, and outputting said amplitude coefficients in accordance with said number of emissions or said intensity; and

a plurality of multipliers multiplying said primary color video signals respectively by said output amplitude coefficients wherein:

said white balance, which varies with the number of emissions for, or the intensities of, said primary color video signals, is corrected by adjusting the amplitudes of said primary color video signals in accordance with said controlled number of emissions or said controlled intensity.

29. (ORIGINAL) The white balance correction circuit as claimed in claim 26, further comprising:

a computing unit computing amplitude coefficients for said primary color video signals in accordance with said number of emissions or said intensity; and wherein:

said white balance, which varies with the number of emissions for or the intensities of said primary color video signals, is corrected by adjusting the amplitudes of said primary color video signals in accordance with said controlled number of emissions or said controlled intensity.

30. (ORIGINAL) The white balance correction circuit as claimed in claim 26, further comprising:

a storage unit storing amplitude-adjusted primary color video signals, and outputting said amplitude coefficients in accordance with said primary color video signals and said number of emissions or said intensity; and wherein:

said white balance, which varies with the number of emissions for or the intensities of said primary color video signals, is corrected by adjusting the amplitudes of said primary color video signals in accordance with said controlled number of emissions or said controlled intensity.

31. (ORIGINAL) The white balance correction circuit as claimed in claim 26,

wherein said detection portion detects said number of emissions or said intensity from a display ratio of an image produced by said primary color video signals.

32. (ORIGINAL) The white balance correction circuit as claimed in claim 26, wherein said detection portion detects said number of emissions or said intensity from a display current that flows when displaying an image in accordance with said primary color video signals.

33. (ORIGINAL) The white balance correction circuit as claimed in claim 26, wherein said detection portion detects said number of emissions or said intensity from an externally applied luminance-adjusting input.

34. (PREVIOUSLY PRESENTED) A white balance correction circuit for use in a display apparatus which displays a color image by controlling the number of emissions or the intensity thereof in accordance with primary color video signals input thereto, and which includes a detection portion detecting said number of emissions or said intensity, wherein output gray levels of images represented by said primary color video signals are adjusted in accordance with input gray levels of said images represented by said primary color video signals, thereby correcting white balance which varies with the number of emissions for or the intensities of said primary color video signals, wherein said white balance correction circuit further comprises:

a first detection portion detecting the input gray levels of said images represented by said primary color video signals; and

a correction portion correcting said white balance by adjusting the output gray levels of said primary color video signals in accordance with said detected input gray levels, and wherein the correction portion comprises:

a computing unit computing gray level correction coefficients in accordance with said detected input gray levels, and

a plurality of correcting units applying corrections to said detected input gray levels by using said computed correction coefficients.

35. (CANCELLED)

36. (CANCELLED)

37. (PREVIOUSLY PRESENTED) The white balance correction circuit as claimed in claim 34, wherein said correction portion comprises:

a storage unit storing and outputting gray level correction coefficients in accordance with said detected input gray levels and the plurality of correcting units apply the corrections to said detected input gray levels by using said output correction coefficients.

38. (PREVIOUSLY PRESENTED) The white balance correction circuit as claimed in claim 34, further comprising:

a second detection portion detecting a display ratio or display current of an image produced by said primary color video signals; and

a control portion controlling the number of emissions for, or the intensities of, said primary color video signals in accordance with said detected display ratio or said detected display current.

39. (CANCELLED)

40. (PREVIOUSLY PRESENTED) A method of correcting white balance in a display apparatus, comprising:

detecting number of emissions or intensity of the emissions, of input primary color video signals; and

adjusting amplitudes of said input primary color video signals in accordance with said detected number of emissions or said intensity of the emissions, thereby correcting the white balance.

41. (ORIGINAL) The white balance correction method as claimed in claim 40, wherein said number of emissions or said intensity is detected from a display ratio of an image produced by said primary color video signals.

42. (PREVIOUSLY PRESENTED) The white balance correction method as claimed in claim 41, further comprising the step of controlling the number of emissions for, or the

intensities of, said primary color video signals in accordance with said display ratio of said image.

43. (ORIGINAL) The white balance correction method as claimed in claim 40, wherein said number of emissions or said intensity is detected from a display current that flows when displaying an image in accordance with said primary color video signals.

44. (ORIGINAL) The white balance correction method as claimed in claim 43, further comprising the step of controlling the number of emissions for, or the intensities of, said primary color video signals in accordance with said image display current.

45. (ORIGINAL) The white balance correction method as claimed in claim 40, wherein said number of emissions or said intensity is detected from an externally applied luminance-adjusting input.

46. (ORIGINAL) The white balance correction method as claimed in claim 45, further comprising the step of controlling the number of emissions for, or the intensities of, said primary color video signals in accordance with said externally applied luminance-adjusting input.

47. (PREVIOUSLY PRESENTED) A method of correcting white balance in a display apparatus which displays a color image by controlling number of emissions or intensity thereof in accordance with primary color video signals input thereto, the method comprising:

adjusting output gray levels of images represented by said primary color video signals according to input gray levels of said images represented by said primary color video signals, thereby correcting the white balance which varies with the number of emissions for, or the intensities of, said primary color video signals, wherein the adjusting comprises:

computing gray level correction coefficients according to the input gray levels of said images represented by said primary color video signals, and

applying corrections to the input gray levels according to the computed correction coefficients.

48. (PREVIOUSLY PRESENTED) The white balance correction method as claimed

in claim 47, wherein the gray level correction coefficient computing comprises detecting the input gray levels of said images represented by said primary color video signals.

49. (PREVIOUSLY PRESENTED) The white balance correction method as claimed in claim 47, further comprising controlling the number of emissions for, or the intensities of, said primary color video signals in accordance with a display ratio or display current of said image.

50. (CANCELLED)

51. (PREVIOUSLY PRESENTED) A method of correcting white balance in a display apparatus, comprising:

defining luminances of input primary color video signals based upon number of emissions for, or intensities of the emissions of, said input primary color video signals; and

setting an amplitude ratio between said input primary color video signals according to the luminances of said input primary color video signals defined by the defining based upon the number of emissions or the intensities of the emissions of the input primary color video signals, thereby suppressing variation of white balance with said luminances.

52. (PREVIOUSLY PRESENTED) The white balance correction method as claimed in claim 51, wherein a color image is displayed by means of light-emitting elements in accordance with luminance-defined primary color video signals.

53. (ORIGINAL) A white balance correction circuit for use in a display apparatus which displays a color image using primary color video signals, comprising:

an adjusting unit adjusting the amplitude of each of said primary color video signals;

a storage unit storing an amplitude ratios for correcting the amplitudes of said primary color video signals; and

a setting unit setting in said adjusting unit amplitude ratios stored in said storage unit wherein:

the amplitude ratio between said primary color video signals is set in accordance with the number of emissions for, or the intensities of, said primary color video signals, thereby correcting white balance which varies with the number of emissions for, or the intensities of, said

primary color video signals.

54. (ORIGINAL) A white balance correction circuit for use in a display apparatus which displays a color image using primary color video signals, comprising:

an adjusting unit adjusting the amplitude of each of said primary color video signals;

a computing unit computing an amplitude ratio for each of said primary color video signals from the number of emissions for, or the intensities of, said primary color video signals;
and

a setting unit setting in said adjusting unit the amplitude ratio computed by said computing unit wherein:

the amplitude ratio between said primary color video signals is set in accordance with the number of emissions for, or the intensities of, said primary color video signals, thereby correcting white balance which varies with the number of emissions for, or the intensities of, said primary color video signals.